RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/583,466
Source: IFW
Date Processed by STIC: 3/26/07

ENTERED

IFWP

RAW SEQUENCE LISTING DATE: 03/26/2007
PATENT APPLICATION: **US/10/583,466** TIME: 11:21:10

Input Set : **F:\P5201R1 Sequence Listing.txt**
Output Set: **N:\CRF4\03262007\J583466.raw**

<110> APPLICANT: Stephen J. Anderson, et al.
<120> TITLE OF INVENTION: Novel Gene Disruptions, Compositions and Methods Relating Thereto
<130> FILE REFERENCE: P5201R1
<140> CURRENT APPLICATION NUMBER: US 10/583,466
<141> CURRENT FILING DATE: 2006-06-15
<150> PRIOR APPLICATION NUMBER: PCT/US2004/041721
<151> PRIOR FILING DATE: 2004-12-13
<150> PRIOR APPLICATION NUMBER: US 60/530,043
<151> PRIOR FILING DATE: 2003-12-16
<160> NUMBER OF SEQ ID NOS: 70
<210> SEQ ID NO: 1
<211> LENGTH: 1210
<212> TYPE: DNA
<213> ORGANISM: Homo sapiens
<400> SEQUENCE: 1

see p.6

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gctgctcggc ctcggactag gcctggaggc cgccgcgagc ccgctttcca 150
ccccgacctc tgcccaggcc gcaggcccca gctcaggctc gtgcccaccc 200
accaagttcc agtgccgcac cagtggctta tgcgtgcccc tcacctggcg 250
ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtgca 300
ggattgagcc atgtacccag aaagggcaat gcccaccgcc ccctggcctc 350
ccctgccccc gcaccggcgt cagtgactgc tctgggggaa ctgacaagaa 400
actgcgcaac tgcagccgcc tggcctgcct agcaggcgag ctccgttgca 450
cgctgagcga tgactgcatt ccactcacgt ggcgctgcga cggccaccca 500
gactgtcccg actccagcga cgagctcggc tgtggaacca atgagatcct 550
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cacagccaga actgaggggc tggccccagg cagctcccag ggggtagaac 1150
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aagttgcttc 1210

<210> SEQ ID NO: 2
<211> LENGTH: 282

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Output Set: **N:\CRF4\03262007\J583466.raw**

79 <212> TYPE: PRT
80 <213> ORGANISM: Homo sapiens
82 <400> SEQUENCE: 2
83 Met Ser Gly Gly Trp Met Ala Gln Val Gly Ala Trp Arg Thr Gly
84 1 5 10 15
86 Ala Leu Gly Leu Ala Leu Leu Leu Leu Gly Leu Gly Leu Gly
87 20 25 30
89 Leu Glu Ala Ala Ala Ser Pro Leu Ser Thr Pro Thr Ser Ala Gln
90 35 40 45
92 Ala Ala Gly Pro Ser Ser Gly Ser Cys Pro Pro Thr Lys Phe Gln
93 50 55 60
95 Cys Arg Thr Ser Gly Leu Cys Val Pro Leu Thr Trp Arg Cys Asp
96 65 70 75
98 Arg Asp Leu Asp Cys Ser Asp Gly Ser Asp Glu Glu Glu Cys Arg
99 80 85 90
101 Ile Glu Pro Cys Thr Gln Lys Gly Gln Cys Pro Pro Pro Pro Gly
102 95 100 105
104 Leu Pro Cys Pro Cys Thr Gly Val Ser Asp Cys Ser Gly Gly Thr
105 110 115 120
107 Asp Lys Lys Leu Arg Asn Cys Ser Arg Leu Ala Cys Leu Ala Gly
108 125 130 135
110 Glu Leu Arg Cys Thr Leu Ser Asp Asp Cys Ile Pro Leu Thr Trp
111 140 145 150
113 Arg Cys Asp Gly His Pro Asp Cys Pro Asp Ser Ser Asp Glu Leu
114 155 160 165
116 Gly Cys Gly Thr Asn Glu Ile Leu Pro Glu Gly Asp Ala Thr Thr
117 170 175 180
119 Met Gly Pro Pro Val Thr Leu Glu Ser Val Thr Ser Leu Arg Asn
120 185 190 195
122 Ala Thr Thr Met Gly Pro Pro Val Thr Leu Glu Ser Val Pro Ser
123 200 205 210
125 Val Gly Asn Ala Thr Ser Ser Ser Ala Gly Asp Gln Ser Gly Ser
126 215 220 225
128 Pro Thr Ala Tyr Gly Val Ile Ala Ala Ala Ala Val Leu Ser Ala
129 230 235 240
131 Ser Leu Val Thr Ala Thr Leu Leu Leu Leu Ser Trp Leu Arg Ala
132 245 250 255
134 Gln Glu Arg Leu Arg Pro Leu Gly Leu Leu Val Ala Met Lys Glu
135 260 265 270
137 Ser Leu Leu Leu Ser Glu Gln Lys Thr Ser Leu Pro
138 275 280
140 <210> SEQ ID NO: 3
141 <211> LENGTH: 1867
142 <212> TYPE: DNA
143 <213> ORGANISM: Homo sapiens
145 <400> SEQUENCE: 3
146 acactggcca aacactcgca tcccagggcg tctccggctg ctcccattga 50
148 gctgtctgct cgctgtgccc gctgtgcctg ctgtgcccgc gctgtcgccg 100
150 ctgctaccgc gtctgctgga cgcgggagac gccagcgagc tggtgattgg 150

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Input Set : **F:\P5201R1 Sequence Listing.txt**
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152  agccctgcgg agagctcaag cgcccagctc tgcccgagga gcccaggctg 200
154  ccccgtgagt cccatagttg ctgcaggagt ggagcctttc cctttgcgat 250
156  cgctaaacca ccatgagctg cgtcctgggt ggtgtcatcc ccttggggct 300
158  gctgttcctg gtctgcggat cccaaggcta cctcctgccc aacgtcactc 350
160  tcttagagga gctgctcagc aaataccagc acaacgagtc tcactcccgg 400
162  gtccgcagag ccatccccag ggaggacaag gaggagatcc tcatgctgca 450
164  caacaagctt cggggccagg tgcagcctca ggcctccaac atggagtaca 500
166  tgacctggga tgacgaactg gagaagtctg ctgcagcgtg ggccagtcag 550
168  tgcatctggg agcacgggcc caccagtctg ctggtgtcca tcgggcagaa 600
170  cctgggcgct cactggggca ggtatcgctc tccggggttc catgtgcagt 650
172  cctggtatga cgaggtgaag gactacacct acccctaccc gagcgagtgc 700
174  aacccctggt gtccagagag gtgctcgggg cctatgtgca cgcactacac 750
176  acagatagtt tgggccacca ccaacaagat cggttgtgct gtgaacacct 800
178  gccggaagat gactgtctgg ggagaagttt gggagaacgc ggtctacttt 850
180  gtctgcaatt attctccaaa ggggaactgg attggagaag ccccctacaa 900
182  gaatggccgg ccctgctctg agtgcccacc cagctatgga ggcagctgca 950
184  ggaacaactt gtgttaccga gaagaaacct acactccaaa acctgaaacg 1000
186  gacgagatga atgaggtgga aacggctccc attcctgaag aaaaccatgt 1050
188  ttggctccaa ccgagggtga tgagacccac caagcccaag aaaacctctg 1100
190  cggtcaacta catgacccaa gtcgtcagat gtgacaccaa gatgaaggac 1150
192  aggtgcaaag ggtccacgtg taacaggtac cagtgcccag caggctgcct 1200
194  gaaccacaag gcgaagatct ttggaagtct gttctatgaa agctcgtcta 1250
196  gcatatgccg cgccgccatc cactacggga tcctggatga caagggaggc 1300
198  ctggtggata tcaccaggaa cgggaaggtc cccttcttcg tgaagtctga 1350
200  gagacacggc gtgcagtccc tcagcaaata caaaccttcc agctcattca 1400
202  tggtgtcaaa agtgaaagtg caggatttgg actgctacac gaccgttgct 1450
204  cagctgtgcc cgtttgaaaa gccagcaact cactgcccaa gaatccattg 1500
206  tccggcacac tgcaaagacg aaccttccta ctgggctccg gtgtttggaa 1550
208  ccaacatcta tgcagatacc tcaagcatct gcaagacagc tgtgcacgcg 1600
210  ggagtcatca gcaacgagag tgggggtgac gtggacgtga tgcccgtgga 1650
212  taaaaagaag acctacgtgg gctcgctcag gaatggagtt cagtctgaaa 1700
214  gcctggggac tcctcgggat ggaaaggcct tccggatctt tgctgtcagg 1750
216  catttccctt tgcggccgcg tgaatttcca gcaccagggg agaaggggcg 1800
218  tcttcaggag ggcttcgggg ttttgctttt atttttattt tgtcattgcg 1850
220  gggtatatgg  agagtca 1867
222 <210> SEQ ID NO: 4
223 <211> LENGTH: 497
224 <212> TYPE: PRT
225 <213> ORGANISM: Homo sapiens
227 <400> SEQUENCE: 4
228  Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe
229    1               5                  10                  15
231  Leu Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu
232                   20                  25                  30
234  Leu Glu Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser
235                   35                  40                  45
237  Arg Val Arg Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu
238                   50                  55                  60
240  Met Leu His Asn Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser
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Input Set : F:\P5201R1 Sequence Listing.txt
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241                   65                  70                  75
243  Asn Met Glu Tyr Met Thr Trp Asp Asp Glu Leu Glu Lys Ser Ala
244                   80                  85                  90
246  Ala Ala Trp Ala Ser Gln Cys Ile Trp Glu His Gly Pro Thr Ser
247                   95                 100                 105
249  Leu Leu Val Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg
250                  110                 115                 120
252  Tyr Arg Ser Pro Gly Phe His Val Gln Ser Trp Tyr Asp Glu Val
253                  125                 130                 135
255  Lys Asp Tyr Thr Tyr Pro Tyr Pro Ser Glu Cys Asn Pro Trp Cys
256                  140                 145                 150
258  Pro Glu Arg Cys Ser Gly Pro Met Cys Thr His Tyr Thr Gln Ile
259                  155                 160                 165
261  Val Trp Ala Thr Thr Asn Lys Ile Gly Cys Ala Val Asn Thr Cys
262                  170                 175                 180
264  Arg Lys Met Thr Val Trp Gly Glu Val Trp Glu Asn Ala Val Tyr
265                  185                 190                 195
267  Phe Val Cys Asn Tyr Ser Pro Lys Gly Asn Trp Ile Gly Glu Ala
268                  200                 205                 210
270  Pro Tyr Lys Asn Gly Arg Pro Cys Ser Glu Cys Pro Pro Ser Tyr
271                  215                 220                 225
273  Gly Gly Ser Cys Arg Asn Asn Leu Cys Tyr Arg Glu Glu Thr Tyr
274                  230                 235                 240
276  Thr Pro Lys Pro Glu Thr Asp Glu Met Asn Glu Val Glu Thr Ala
277                  245                 250                 255
279  Pro Ile Pro Glu Glu Asn His Val Trp Leu Gln Pro Arg Val Met
280                  260                 265                 270
282  Arg Pro Thr Lys Pro Lys Lys Thr Ser Ala Val Asn Tyr Met Thr
283                  275                 280                 285
285  Gln Val Val Arg Cys Asp Thr Lys Met Lys Asp Arg Cys Lys Gly
286                  290                 295                 300
288  Ser Thr Cys Asn Arg Tyr Gln Cys Pro Ala Gly Cys Leu Asn His
289                  305                 310                 315
291  Lys Ala Lys Ile Phe Gly Ser Leu Phe Tyr Glu Ser Ser Ser Ser
292                  320                 325                 330
294  Ile Cys Arg Ala Ala Ile His Tyr Gly Ile Leu Asp Asp Lys Gly
295                  335                 340                 345
297  Gly Leu Val Asp Ile Thr Arg Asn Gly Lys Val Pro Phe Phe Val
298                  350                 355                 360
300  Lys Ser Glu Arg His Gly Val Gln Ser Leu Ser Lys Tyr Lys Pro
301                  365                 370                 375
303  Ser Ser Ser Phe Met Val Ser Lys Val Lys Val Gln Asp Leu Asp
304                  380                 385                 390
306  Cys Tyr Thr Thr Val Ala Gln Leu Cys Pro Phe Glu Lys Pro Ala
307                  395                 400                 405
309  Thr His Cys Pro Arg Ile His Cys Pro Ala His Cys Lys Asp Glu
310                  410                 415                 420
312  Pro Ser Tyr Trp Ala Pro Val Phe Gly Thr Asn Ile Tyr Ala Asp
313                  425                 430                 435
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315 Thr Ser Ser Ile Cys Lys Thr Ala Val His Ala Gly Val Ile Ser
316 440 445 450
318 Asn Glu Ser Gly Gly Asp Val Asp Val Met Pro Val Asp Lys Lys
319 455 460 465
321 Lys Thr Tyr Val Gly Ser Leu Arg Asn Gly Val Gln Ser Glu Ser
322 470 475 480
324 Leu Gly Thr Pro Arg Asp Gly Lys Ala Phe Arg Ile Phe Ala Val
325 485 490 495
327 Arg Gln
330 <210> SEQ ID NO: 5
331 <211> LENGTH: 2359
332 <212> TYPE: DNA
333 <213> ORGANISM: Homo sapiens
335 <400> SEQUENCE: 5
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338 tgctggcctg gcctggatct tccaccatgt tcctgttgct gccttttgat 100
340 agcctgattg tcaaccttct gggcatctcc ctgactgtcc tcttcaccct 150
342 ccttctcgtt ttcatcatag tgccagccat ttttggagtc tcctttggta 200
344 tccgcaaact ctacatgaaa agtctgttaa aaatctttgc gtgggctacc 250
346 ttgagaatgg agcgaggagc caaggagaag aaccaccagc tttacaagcc 300
348 ctacaccaac ggaatcattg caaaggatcc cacttcacta gaagaagaga 350
350 tcaaagagat tcgtcgaagt ggtagtagta aggctctgga caacactcca 400
352 gagttcgagc tctctgacat tttctacttt tgccggaaag gaatggagac 450
354 cattatggat gatgaggtga caaagagatt ctcagcagaa gaactggagt 500
356 cctggaacct gctgagcaga accaattata acttccagta catcagcctt 550
358 cggctcacgg tcctgtgggg gttaggagtg ctgattcggt actgctttct 600
360 gctgccgctc aggatagcac tggctttcac agggattagc cttctggtgg 650
362 tgggcacaac tgtggtggga tacttgccaa atgggaggtt taaggaattc 700
364 atgagtaaac atgttcactt aatgtgttac cggatctgcg tgcgagcgct 750
366 gacagccatc atcacctacc atgacaggga aaacagacca agaaatggtg 800
368 gcatctgtgt ggccaatcat acctcaccga tcgatgtgat catcttggcc 850
370 agcgatggct attatgccat ggtgggtcaa gtgcacgggg gactcatggg 900
372 tgtgattcag agagccatgg tgaaggcctg cccacacgtc tggtttgagc 950
374 gctcggaagt gaaggatcgc cacctggtgg ctaagagact gactgaacat 1000
376 gtgcaagata aaagcaagct gcctatcctc atcttcccag aaggaacctg 1050
378 catcaataat acatcggtga tgatgttcaa aaagggaagt tttgaaattg 1100
380 gagccacagt ttaccctgtt gctatcaagt atgaccctca atttggcgat 1150
382 gccttctgga acagcagcaa atacgggatg gtgacgtacc tgctgcgaat 1200
384 gatgaccagc tgggccattg tctgcagcgt gtggtacctg cctcccatga 1250
386 ctagagaggc agatgaagat gctgtccagt ttgcgaatag ggtgaaatct 1300
388 gccattgcca ggcagggagg acttgtggac ctgctgtggg atgggggcct 1350
390 gaagagggag aaggtgaagg acacgttcaa ggaggagcag cagaagctgt 1400
392 acagcaagat gatcgtgggg aaccacaagg acaggagccg ctcctgagcc 1450
394 tgcctccagc tggctggggc caccgtgcgg ggtgccaacg ggctcagagc 1500
396 tggagttgcc gccgccgccc ccactgctgt gtcctttcca gactccaggg 1550
398 ctccccgggc tgctctggat cccaggactc cggctttcgc cgagccgcag 1600
400 cgggatccct gtgcacccgg cgcagcctac ccttggtggt ctaaacggat 1650
402 gctgctgggt gttgcgaccc aggacgagat gccttgtttc ttttacaata 1700
404 agtcgttgga ggaatgccat taaagtgaac tccccacctt tgcacgctgt 1750

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/26/2007
PATENT APPLICATION: **US/10/583,466** TIME: 11:21:11

Input Set : **F:\P5201R1 Sequence Listing.txt**
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FYI

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 911

VERIFICATION SUMMARY DATE: 03/26/2007
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Input Set : **F:\P5201R1 Sequence Listing.txt**
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L:907 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:900